

00/486643

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of)
Klaus W. Hartig, et al.) Examiner:
Serial No.: (Cont. Appln. of) Group Art Unit: 1508
S.N. 08/102,281 filed 8/5/93))
Filed: (concurrently herewith)) Atty. Dkt. No.: 2372.853
For: HEAT TREATABLE, DURABLE,)
IR-REFLECTING SPUTTER-)
COATED GLASSES AND METHOD)
OF MAKING SAME)

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. §1.97 AND §1.56

#3
KD
8-19-95

Hon. Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Now come Applicants and make the following Information Disclosure Statement in accordance with 37 C.F.R. §1.97 and §1.56:

The most relevant prior art of which Applicants are aware is discussed in summary form in the BACKGROUND OF THE INVENTION section of the above-identified application. The relevant references are as follows, and are more appropriately listed on the PTO-1449 form attached hereto:

<u>U.S. PATENT NO.</u>	<u>INVENTOR</u>	<u>ISSUED</u>
3,272,986	Schmidt	9/13/66
3,681,042	Edwards et al.	8/1/72
3,798,146	Wan et al.	3/19/74
3,826,728	Chambers et al.	7/30/74
3,935,351	Franz	1/27/76
4,166,018	Chapin	8/28/79
4,413,877	Suzuki et al.	11/8/83
4,462,883	Hart	7/31/84

4,594,137	Gillary et al.	6/10/86
4,680,742	Yamada et al.	7/14/87
4,715,879	Schmitte et al.	12/29/87
4,769,291	Belkind et al.	9/6/88
4,780,372	Tracy et al.	10/25/88
4,790,922	Huffer	12/13/88
4,816,034	Bhatt et al.	3/28/89
4,826,525	Chesworth et al.	5/2/89
4,857,094	Groth et al.	8/15/89
4,948,482	Kobayashi et al.	8/14/90
4,954,232	Yamada et al.	9/4/90
5,062,937	Komuro	11/5/91
5,188,887	Linge et al. (Lingle)	2/23/93
5,229,194	Lingle et al.	7/20/93
5,344,718	Lingle et al.	9/6/94
5,376,455	Lingle et al.	12/27/94
5,377,045	Wolfe et al.	12/27/94

Airco Super-E III™ Coating Process Release (Redacted)

Airco SuperE™ IV Technology Process Release, p. 1-23
(Redacted)

A copy of each of these references accompanies this I.D.S., along with a Petition to Expunge regarding certain Airco technology and to substitute in its place a redacted version of the reference which is presented herewith. As documents, they speak for themselves and, as such, Applicants request that the Examiner carefully study them rather than relying upon the summary nature of the discussion concerning them in the aforesaid application. These references are reflective of the state-of-the-art at the time our invention was made.

Still further disclosure, without citation of reference, is made to the general fact, known in the art (i.e. and thus part of the prior art) prior to our invention that if some argon gas is mixed with nitrogen gas in sputter-coating, sputter productivity of Si and other metals could be improved. It is also known that Si_3N_4 can be used as a coating in transmissive

glasses for its scratch-resistance and anti-reflectance characteristics, among others.

Further appended hereto for the Examiner's consideration is a copy of ASTM E424-71(E1) and the 1991 Proposed ASTM Standard (Proposed by the Primary Glass Manufacturers' Council) for measurement of the near and far (referred to as the mid range) infrared energy spectrum (i.e. 2,500-40,000nm). The first ASTM Standard is applicable to the calculation of transmittance and reflectance as reported in our application. The Proposed 1991 Standard was used to calculate the emissivity data reported in our application.

The subject application also discloses in its background the subject matter of pending application Serial No. 07/876,350, "High Performance, Durable, Low-E Glass and Method of Making Same" (filed 4/30/92, now U.S. Patent No. 5,344,718). The Examiner is requested to assume that its disclosure is prior art to this invention.

Respectfully submitted,

Date: June 7, 1995



Klaus W. Hartig

Date: June 7, 1995



Philip J. Lingle

Attachments